Energy Policy Review Commission - Unofficial Minutes
Wednesday June 19, 2013
1:00pm – 3:00pm
Executive Office of Energy and Environmental Affairs
2nd Floor Conference Room A

Members in Attendance:

Elliott Jacobson	Action, Inc.
Robert Kaufmann	Boston University
Sandra Merrick	AGO
Tom Regh	Progressive Energy Services
Bob Rio	A.I.M
Rob Calnan	Calnan's Energy Services

Others in Attendance:

Hinna Upal	EEA
Lauren Farrell	EEA
Jodi Hanover	Rich May, P.C.
Rita Carvhalho	Action Inc
Kevin Galligan	Cape Light Compact
Ben Davis	DOER
Ryan Moulton	Office of Rep. Beaton
Andrew Goldberg	AGO
Martha Broad	MassCEC
Stolle Singleton	Office of the House Minority Leader
Jessica Bardi	EEA
Justin Lukoff	EEA

Documents Discussed:

- Agenda
- Draft Report
- List of draft objectives and metrics

Hinna Upal called the meeting to order at 1:05pm.

Introduction

Ms. Upal welcomed the Commission members and meeting attendees and started the introductions around the room. She noted that both Undersecretary Kates-Garnick and Mr. Burgess are out of the office and unable to attend the meeting. She said the extension has not been confirmed but the Commission should still work towards the July-1 deadline. She thanked Mr. Jacobson for his recent submission and noted that Mr. Regh had also submitted something. Mr. Regh said he had sent over some preliminary input in the outline format as asked. He said that he has not had a chance to fill out the input entirely but is hoping the extension will pass so he can have more time to focus on the other areas. Ms. Upal asked if Mr. Regh's recent submission is an updated version of his first submission. Mr. Regh replied that it is an updated and reorganized submission. Ms. Upal asked if he preferred to use this

version from now on. She said there are a lot of metrics included and the Commission should vote on which will be included in the report and which will stay in Mr. Regh's position. She noted that Mr. Rio submitted a position on jobs and renewables that the Commission should discuss. Mr. Rio noted that some of the metrics he included have already been discussed by the Commission. Ms. Upal asked if a chart of all the programs as requested by the Legislature had been completed. Ms. Singleton noted that it has not yet been completed but will send it shortly. Ms. Upal responded that it would be helpful. She asked if Mr. Rio wanted to discuss his positions on jobs. Mr. Rio noted that his position has been consistent with what he has been saying; he wants to get more information on the number of jobs, net jobs, and the source of funding. Mr. Regh noted that he has a sentence in the beginning of his position about the analysis and that energy efficiency created 2300 jobs. He continued that 2300 FTE doesn't mean those jobs were created but that there are 2300 workers directly working. Mr. Rio responded that in energy efficiency, those are mostly likely new jobs. Ms. Upal asked if Mr. Rio would like to change the wording in his position. Mr Rio decided to change his wording from "creating" to "employs". He said he was trying to show there is a range. Ms. Hanover suggested Mr. Rio not try to compare two studies as they do not have the same framework and said she could get him the studies to look over. Mr. Rio replied that the Clean Industry Job Report is probably correct. He continued that it is not the numbers he is concerned about, more so the conclusions that say policies are bringing in 20,000 jobs. He said he feels that conclusion is not correct as there are several factors. Mr. Regh noted that the Clean Industry Jobs report counts individuals, not FTE where as the other study does count FTE and was a 2011 study. Mr. Jacobson said the problem with numbers is that it's like comparing apples and oranges and reiterated the idea of "jobs sustained". Mr. Rio said that the $600 million has to be coming from somewhere. Professor Kaufmann asked if Mr. Rio said it is *impossible* for that to happen. Mr. Rio replied that he is saying that. Professor Kaufmann said there is a multiplying effect of 9 to 1, which isn't impossible. He said in economics, people wouldn't view it as impossible to have a 10 to 1 multiplier. He said one could spend $1 and get $3-10 activity; it's not impossible to get that kind of ROI. He also noted there are diminishing costs. Mr. Rio noted that it is important to ask where the funding is coming from. Professor Kaufmann replied that every tax goes to benefit other sectors. Mr. Rio said that tax money is different than earmarked money. He said there is money transferred from one sector to another and people might not benefit from it. Mr. Rio said it is different. Professor Kaufmann disagreed. Mr. Jacobson said rate paying money is different from tax money as rate payer money is as responsible as taxpayer money is in a societal way. Mr. Galligan noted that with the System Benefit Charge, there is an overall reduction. Mr. Rio said he agreed that it contributes to the greater good however his opposition is based on the justification for job creation. Mr. Calnan noted that he had been surveyed that morning. He said the survey was very specific but did not ask how many full and part time employees he had. He said he told the surveyors that the ratepayer money should stay in the state and asked where they were surveying from. He noted they answered that they were out of state. He continued that he was asked why his business is in Massachusetts and his percentage of time worked. Professor Kaufmann noted that it is unknown how these surveyors are reporting their jobs. Mr. Rio said they are probably counting them as clean jobs.

Ms. Upal said discussion is good; this was just Mr. Rio's position and the other members are encouraged to submit their positions. She asked if Mr. Jacobson wanted to speak on his position on reliability. Mr. Jacobson said he feels there is a failure of good predictions of future prices. He said there are short and long term predictions of lower prices and there have been warnings there will be a seismic shift. He continued that there is need to support energy efficiency and renewables. Ms. Merrick noted that in the middle of the first paragraph of Mr. Jacobson's position, he assumes other places won't find shale gas

like the U.S. has. Mr. Jacobson replied that LNG may go away and there is a lot of uncertainty. Mr. Rio said there is no diversity if there are no plants. Mr. Galligan noted that renewables are shaking up volatility as they are long term fixed contracts and won't have the same volatility as natural gas.

Increasing Electricity Reliability

Mr. Rio stated that he felt there is more consensus among the group than people think. Ms. Upal referred the metrics listed in the draft report. Mr. Regh stated that he feels metrics have to be quantitative and measurable. He asked how diversification can be measured, for example. Professor Kaufmann said that diversification can be measured. Ms. Upal noted that all of the metrics have been in question form but Mr. Regh is right in that they need to be measured now. She said there will be numbers for the metrics and there will be some that are not available as well. Mr. Regh agreed and asked how a number could be calculated for diversification, possibly percentage of fuel used. Professor Kaufmann said there are two aspects, diversification in the names of fuel but also in terms of prices. He asked if there should be a discussion of what is meant by diversity. Mr. Regh replied that the topic is reliability so diversity in terms of reliability. Ms. Merrick said she does not disagree with all of this but the Commission needs to fill out the metrics, not be asking more questions. Mr. Galligan said he thinks the Commission should work on what they can get done. Ms. Upal noted that the Commission needs to determine where research needs to be done and what metrics can be answered. Mr. Regh noted some metrics the Commission can put numbers to: percentage of availability; outages related to storm events; number of outages related to equipment failures; mean duration of outages; money budget annually for maintenance; and under vs. above transmission lines. Ms. Merrick noted that most of those should be reported by utility companies to DPU. Mr. Regh asked if that data could be put into the report. Ms. Merrick said she would look into what data is available. Mr. Jacobson state that the Commission is not the DPU and thinks the Commission should summarize this data instead. Ms. Singleton asked Mr. Jacobson expected the Legislature to go look for the data. She said the idea of the Commission is to synthesize the information and if there are numbers, to include them in the report. Mr. Jacobson replied that he thinks it's incorrect to say what is right and what is wrong. Ms. Singleton noted that the Commission should vote on this and the Legislature will have the Commission's expertise in mind when going over the report. Ms. Davis noted that some of the metrics are similar, such as SAIDI and SAIFI which are filed annual by utilities. He said some data will be hard to get at but the utilities make these filings every year. He also noted that the DPU has opened an SQ docket which is very detailed and statistical. He said he agrees with Mr. Jacobson that it will be difficult for the Commission to get up to speed with all of this data. Ms. Singleton said the positions of the DPU could be stated and that she feels synthesis is very important. Ms. Merrick said that facts should be put into the report and what they are, where to find them, and what they mean should also be included. Ms. Singleton agreed saying it would be helpful and opinions from the Commission members could be included in the recommendations.

Ms. Upal said the Commission should agree on metrics and the next step would be to research for any numbers to support them. She said the Commission members should build their positions from there. She stressed the importance of getting the Commission's positions and said the members could include any numbers they think are important and the Commission can have a discussion whether to include those in the global report. Ms. Carvhalho asked if there is year to year information comparing service reliability. Ms. Merrick said that could be done with the yearly data in the SQ report. Mr. Regh agreed it would be nice to see that. Professor Kaufmann asked if there was a way to separate out the weather related instances and that he would also like to see the reliability of dispatch and transmission. Ms. Merrick responded that transmission and distribution can be separated out and it could be said that

weather is more extreme, businesses are investing less, and there are many different reasons but it is a difficult area. Mr. Galligan noted there are metrics on the distribution side and ISO has a wealth of information on the generation side. Ms. Merrick noted that energy mix diversification changes with the weather. Mr. Regh asked if that was reliability. Ms. Merrick replied that it could, if there isn't diversification. Mr. Galligan said there is a derating affect at natural gas plants; wind turbines are dependent on water. Mr. Jacobson noted that 10 years ago, an ice dam issue caused oil prices to go up overnight. Professor Kaufmann said that is the outcome when you deregulate utilities to run at the lowest possible cost and this needs to be addressed fundamentally. He said that people want the cheapest electricity and want it really reliable. He said something the legislature needs to look at is deregulation; people swing towards low costs and forget about reliability. Ms. Merrick noted DOER has a restructuring study. Professor Kaufmann said there are two conflicting goals inherent in the process and they should be looked at explicitly. Mr. Rio said there is no availability to switch anymore, even with renewables. Professor Kaufmann said he guesses plants can switch over in a matter of weeks; capability is there because the infrastructure is there so capacity could be switched. Mr. Jacobson said that oil has to be burned off every 30 days and that it is a dying industry and more parity is needed. Professor Kaufmann asked what Mr. Jacobson meant by parity. Mr. Jacobson replied that he meant price parity. Professor Kaufmann said that cannot happen. Mr. Goldberg noted there is potential for storage of renewables in the report.

Ms. Upal asked if anyone had thoughts on volatility. Mr. Galligan said volatility might come through grid modernization. He said there are prices signals to switch load but today, there is nothing to send those signals. Professor Kaufmann said there is evidence that people pay attention to price signals. Mr. Galligan noted that capabilities are coming. Mr. Jacobson said he is afraid of the price of meters which are better for efficiency. Professor Kaufmann noted that smart meters in residential housing are less likely to increase efficiency. Ms. Merrick asked when the DPU grid modernization investigation was finishing. Ms. Davis said the report is due on July 3rd and there is a lot of information in it that has been discussed by the Commission. He noted that DPU has said they would look further into the issue after the report is finished.

Ms. Upal asked if "the price of renewables approaching grid parity" should be included as a metric. Professor Kaufmann asked what she meant by that metric. Ms. Upal replied that it could mean the price of solar is on par with other electricities, for example. Professor Kaufmann said there is no single price anymore because things are getting turned on and off. Mr. Davis noted there are prevailing market prices; typically an average. Mr. Rio said there are days when the price is $0.50 and days where it is $0.06. Professor Kaufmann agreed, saying that was his point as to what exactly the price is. Mr. Rio responded that it is the average over the year. Professor Kaufmann responded that renewables have technology to correct for reactive power; renewables enhance stability, and therefore reactive power. Mr. Rio asked Professor Kaufmann to clarify. Professor Kaufmann said there are two waves that need to be in phase and there are ways to correct for reactive power. Mr. Regh said there is a phase relation for voltage and current. Professor Kaufmann said that requires spinning reserve. Mr. Davis noted that this has been talked about in the grid modernization docket; the utility is required to provide high quality power.

Ms. Upal asked if "ease of implementation" should be included as a metric as the Commission has discussed the topic before. Mr. Regh said there is not metric for that and asked if that is something through DPU. Ms. Merrick replied it would be in DPU Docket 11-75. Ms. Upal asked if that was more of

an interconnection issue. Ms. Merrick said it was but it would work. Mr. Regh asked if it is a distributed system; on cloudy days they are still on the grid. Ms. Merrick replied that it is both distributed generation technology and backup; off-grid and backup could be separated. Professor Kaufmann asked if anyone is every really off the grid. Mr. Rio said that is part of the problem, no one is off until they need to be on. Mr. Davis said that Docket 11-75 happened because DPU wanted to improve the process to connect distributed generation. He said that as far as how much net metering is happening, DPU has data for how full the caps are on their website. Ms. Merrick noted that people get angry if they are on the list for too long and utilities aren't moving fast enough. Ms. Singleton said this is in the interest of the legislation especially how full is the cap really and how large is the queue. Mr. Davis noted that Nathan Phelps at DPU is really the point person to speak on this topic.

Ms. Upal asked if the Commission wanted to discuss how to do research on these topics. Ms. Merrick asked if there were any information requests still outstanding. Professor Kaufmann said that all but one of his requests is outstanding but he is working with people on it. Ms. Merrick said she could pull together the SQ information. Professor Kaufmann said he is working on how the prices of fuel are correlated to one another.

Ms. Upal said the members' positions will be added in and then the Commission can look for correlating sources, citations, and research. She reminded the Commission that drafting positions of the parties is helpful so the Commission can find some consensus. Ms. Singleton noted that the extension request was passed in the house but now it has to pass in the Senate. Ms. Upal said that the Commission should still go full throttle while waiting for an answer. Professor Kaufmann asked if Commission members can personally contact the Legislature regarding the extension. Ms. Singleton said that is possible and members should contact Sen. Downing.

Mr. Regh said that he needed clarification on a recent draft of the report (pg 8-9). He noted that "decreased to 4.46%" should be changed to "increased to 4.46%" and questioned what was meant by "contractors assume the risk" with the zero interest loan. He asked that the "300% variance between Mass Save and non-Mass save contactors" be backed up with data and asked for clarification on "methane is twenty times stronger than carbon dioxide". Professor Kaufmann noted that there is twenty times more energy in a molecule of methane and it absorbs more heat, which is why it is more dangerous. Mr. Regh also questioned the "direct oil efficiency measures" (pg 10) saying homes that use fuel sources can be weatherized. Mr. Galligan noted this is in the SBC discussion. Mr. Regh said that should be clarified. Mr. Regh also questioned the "people saving oil" metric (pg 10) saying there are resource benefits. Professor Kaufmann noted that metric was coming from DOER and Ms. Halfpenny could comment on it. Mr. Regh said that fuel oil is the most common source for heating and is in areas served by the 5 IOUS; municipals don't benefit by this. Ms. Merrick said these same people don't have access to natural gas and with the pipeline expansion, there is not chance to convert.

Ms. Upal asked all members to submit their positions and EEA will add them to the report. Mr. Jacobson asked if there would be a meeting the week of July-4. Ms. Farrell said she will look into it and if members will be out of town for the holiday, the meeting can be cancelled.

The meeting adjourned at 2:44pm.